



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,233	12/31/2001	Herve Cassagnes	01RO11554371	7300
27975	7590	05/03/2005	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.			PHU, PHUONG M	
1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE				
P.O. BOX 3791			ART UNIT	PAPER NUMBER
ORLANDO, FL 32802-3791			2631	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**Application No. **10/039,233**

Applicant(s)

CASSAGNES, HERVE

Examiner

Phuong Phu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-16, 18-20, 22-27, 29-33 and 35 is/are rejected.
- 7) ☒ Claim(s) 17, 21, 28 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13-16, 19-20, 23-27, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiramatsu (5,778,031).

-Regarding to claims 13 and 30, see figures 5-7 and col. 4, line 34 to col. 8, line 24, Hiramatsu discloses a method and associated system (see figure 5) for decoding a biphasic signal comprising:

register step/means (31) of precharging the states (half bit data) of a biphasic signal (a), one state of the pair of states being precharged at each pulse of a periodic precharging signal (c) (see also figure 7); and

verification step/means (32-44) of comparing the two states of the pair of states to detect an error and providing an signal based upon detecting the error (see col. 6, lines 41-48).

-Regarding to claims 14 and 31, Hiramatsu discloses that the error comprises the two states being equal (see col. 5, line 57-62 to col. 7, line 23).

-Regarding to claims 15 and 32, Hiramatsu discloses that pair of states represent a value (see figure 6(a)), and wherein said verification also provides a decoded signal (Bi-PHASE SIGNAL DECODED OUTPUT) indicating the value of the precharged pair states (see figure 5).

-Regarding to claims 16 and 33, Hiramatsu discloses a storage circuit (12) (see figure 5) for storing the decoded signal at each pulse of a periodic validation signal (n), the periodic validation signal having a period equal to twice the period the periodic precharging signal (c ) (see also figure 7).

-Claim 19 is rejected with similar reasons set forth for claims 13-15.

-Claim 20 is rejected with similar reasons set forth for claim 16.

-Claim 23 is rejected with similar reasons set forth for claim 13. Further regarding to claim 23, Hiramatsu discloses transmission and reception circuitry (figure 5) comprising a circuit (1) for sending biphas signals to a receiving circuitry (circuits shown in figure 5 excluding circuit (1)).

-Regarding to claim 24, Hiramatsu discloses that biphas signals are encoded according to a protocol (see col. 1, lines 19-40).

-Claim 25 is rejected with similar reasons set forth for claim 14.

-Claim 26 is rejected with similar reasons set forth for claim 15.

-Claim 27 is rejected with similar reasons set forth for claim 16.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2631

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18, 22, 29 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramatsu in view of Okada et al (6,175,542).

-Regarding to claims 18, 22, 29 and 35, Hiramatsu does not disclose that the biphasic signal is filtered prior to being precharged.

Okada et al teaches using a filter (98, 100) for filtering a received coded signal to be decoded so that noise in the received coded signal is reduced or eliminated by the filtering (see figures 7 and 12, and col. 8, lines 18-35).

It would have been obvious for one skilled in the art to implement in Hiramatsu invention a filter, as taught by Okada et al, in such a way that the filter would filter the biphasic signal from noise before the biphasic signal being precharged to be further decoded so that distortions, which are caused by the noise and may affect the performance of the decoding process, would be avoided.

#### ***Allowable Subject Matter***

6. Claims 17, 21, 28 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

Art Unit: 2631

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuong Phu  
03/16/05

**PHUONG PHU**  
**PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631